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MCDANTEL AND ASSOCIATES

Page 2

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MCDAMIEL AND ASSOCIATES

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Ile Thr Val Thr Asn Pro Ala Arg Phe Tyr Val Thr Asp Leu Ala Gly 325 330

Val



Protein Comparisons Percent Identity

DNA Comparisons Percent Identity

McDaniel vs Wild Lab	57.8%	McDaniel vs Wild Lab	88.0%
McDaniel vs Serdar	59.5%	McDaniel vs Serdar	83.7%
Serdar vs Wild Lab	100%	Serdar vs Wild Lab	99.6%

McDanial.proMot Gln Thr Arg Arg Val Val Lou hys Ser Ala Ala Arg Thr Leu Lou Gly Gly Lou Ala Gly Cys Ala Thr Trp Leu Asp Arg	2.9
Wild Lab. PRO Met And Sin Thr Arg Arg Val Val Lou hys Ser Ala Ala Ala Ala Ala Chy Thr Leu Lou Gly Gly Lou Ala Gly Cyz Ala Sor Yel Ala Gly Sar	2
The Let Lot GIV Lik Ard Ard Ard Ard Lot Lya Ser Ard Ard Ard Ard Ard Let Lot GIV GIV Lot Ard GIV CV3 Ard GUENNAL ARD	1 30
McDaniel. pro Sor Ala Gin Ala Met Arg Ser Ile Arg Ala Arg Pro Ile Thr Ile Ser Glu Ala Gly Phe Thr Leu Thr His Glu Asp Ile Ser Ala	58
Wild Lab PROTINGLY AND THE AND MARY AND MARY AND PRO ILE THE ILE SET GLU ALE GLY PHE THE LEW THE HIS GLU AND ILE CHARLES	1 32
Serdar. pro The Gly Res Are The Men The Well Arg Ely Pro Ilo Thr Ile Ser Clu Ala Gly Phe Thr Lou Thr His Glu Hid Ile type Gly	60
McDaniel pro Ala Arg Gla Asp Waller Ser Cys Val Leu Gly Gla Ser Ser Ser Val Ala Cla Ser Ser Ser Gly Lys Gly Cys Glu Arg Wild Lab PROBET Ser Arg Gly Who Leu Arg Ala Try Bro Gly The Phy Gly Ser Arg Lys Ala Cly Lys Ala Cly Well Well Well Ward	83
Serder of Serice Alta Cly Share and Cly Free Ard Cly Serice Arg Cys. Alexand Ala Cly Cys. Alexand Cly - Ben Arg	P()
and the state of t	00
McDaniel. pro lie Ala Arg Gin Ser Gly Trp Arg Ala Asn Asp Cys Arg Cys Val Asp Phe Arg Tyr Arg Ser Arg Arg Gin Fhe 11g Gly Arg Gly Pho	11.
Wild Lab PROAM Ala Arg Ala AM Gly Wal arg Thr Tia Wal Agp Val Sec The Phe Rap Lie My Arg Ash Val Ger Lew Lah Ala Gly Wel Sex	
Serdar pro Arg Ala Arg Ala Ala Gly tal Arg the tip tal w App Valuer Tar Pho Red Lie Gly Arg App Tal Ser Leu Ala Cla Val Ser	11.
McDaniel. pro Ala Gly Cys Arg Arg Ser Tyr Leu Ala Ala Thr Gly Leu Trp Phe Asp Pro Pro Leu Ser Met Arg Leu Arg Tyr Val Glu Glu Leu Thr	
Wild Lab. PROAKE Ala Ala Ala Mag Wat Mag Wall Ala Ala Thr Gly Lou Trp Phe Asp Pro Pro Leu Ser Met Arg Lou Arg Ser Val Glu Glu Leu Thr	. 17
Serder.pro Arganiza Ser. Val Has Che. Val Ala Thr Gly Leu Trp Pho Asp Pro Pro Lau Ser Met Arg Leu Arg Ser Val Glu Glu Leu Thr	14.
McDaniel.pro Leu Vol Leu Pro Ala Vol Arg Phe Asn Met Ala Ser Lys Tyr Thr Gly Ile Arg Ala Gly Ile Ile Lys Vol Ala Thr Thr Gly Lys	17:
Wild Lab. PRO Glin Pha The Leu Nig Wil ILE Glin The Cly ILE Gli Asp. Thr Gly Ile Arg Ala Gly Ile Ilo Lys Val Ala Thr Thr Gly Lys	14'
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Wild Lab. PROALs Thr Pro Phe Gln Glu Leu Val Leu Lys Ala Ala Arg Ala Sgr Leu Ala Thr Gly Val Pro Val Thr Thr His Thr Ala Ala Ser	
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McDaniel, proGin arg Aep Gly Glu Arg Gly Arg Pro Pro Phe Leu Ser Pro Lys Leu Glu Pro Ser Arg Val Cys Ile Gly His Ser Aep Aep Thr Asp	
Wild Lab. PROGIN Arg Asp Gly Glu Gin Alexale Alexale The Pro Ser Glu Gly Leu Reg Pro Ser Arg Val Cys Ile Gly His Ser Asp Asp Thr Asp Serdar.pro Gln Arg Asp Gly Glu Gly Alexale Tip Pro Gly Ser Cly Gly Leu Reg Pro Ser Arg Val Cys Ile Gly His Ser Asp Asp Thr Asp	
Series 190 Gir Ang May Gir (Marine Marine Marine) and Design and Design and Marine Mar	20,
McDaniel pro Asp Leu Ser Tyr Leu Thr Ala Leu Leu Commang Gly Tyr Leu Ile Gly Leu Asp His Ile Pro His Ser Ala Ile Gly Leu Glu Asp Asn	26
Wild Lab. PRO Rep Leu Sqr Tyr Leu Thr Ala Leu Ala Arg Gly Tyr Leu Ilo Cly Leu Aep Hie Ilo Pro Hie Ser Ale Ilo Gly Leu Glu Asp Asn	
Sardor.pro Asp Lou Ser Tyr Lou Thr Ala Lou Arg Gly Tyr Lou Ile Gly Lou Asp His Ile Pro His Ser Ala Ile Gly Lou Glu Asp Asn	26.
McDaniel, pro Ala Ser Ala Ser Fro Leu Leu Gly Ile Arg Ser Trp Gin Thr Arg Ala Leu Leu Ile Lys Ala Leu Ile Asp Gin Gly Tyr Met Lys Gin	20.
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McDaniel, pro Ala Phe Ile His	32.
Wild Lab. PROAls Pho Tiefred Lou Arg Val lie Pro Pho Lou Arg Glu Lys Gly Val Pro Gln Glu Thr Leu Als Gly Ile Thr Val Thr Asn Pro Ala	
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McDanigl.pro Wild Lab.PROArg Phe Leu Ser Pro Thr Leu Arg Ala Ser	32. 32.
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Decoration 'Decoration #2': Box residue: that differ from McDaniel.pro.

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                                                                                                                          Wild lab opu._ag
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48
     GCGATCCGATCAATAC CGTGCGCG-TCCTATCACAATCTCTGAAGCGGGT McDaniel 2 diming:
      GCGATEMCANTALEGGTGCCCGGTCCTATCACAATCTCTGAAGCGGT Wild lab opd. meg
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Decoration 'Decoration 92': Now residues that differ from McDaniel P diminute.com

Works Cited

McDaniel P. diminuta:

McDaniel, C.S., Harper, L.L. and Wild, J.R., Cloning and sequencing of a plasmid-borne gene (opd) encoding a phosphotriesterase, J. Bacteriol. 170 (5), 2306-2311 (1988). Gene Bank Accession Number: M20392

Oph-lab RC: Wild lab DNA sequence

Serdar: Serdar Sequence obtained from United States Patent and Trademark Office (uspto.gov) Patent Number 5,484,728

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